

REMARKS

The Examiner rejected Claims 17-19 under 35 U.S.C. § 112, second paragraph as being indefinite. The Examiner objects to the Specification for missing the letter "e" in the word "system." The Examiner rejected Claims 6-11 and 17-19 under 35 U.S.C. § 102(b) as being anticipated by Feher, Patent Number 5,117,638. The Examiner rejected Claims 6-11 and 17-19 under 35 U.S.C. § 102(b) as being anticipated by Abadilla, Patent Number 5,564,276. The Examiner rejected Claims 15 and 16 under 35 U.S.C. § 103(a) as being unpatentable over Feher in view of Park, Patent Number 6,006,524. The Examiner rejected Claims 1-5 and 14 under 35 U.S.C. § 103(a) as being unpatentable over Abadilla in view of Lee, Patent Number 6,701,719. Such rejections are noted.

Claims 1 and 6 have been amended and Claims 24 and 25 have been added. No new matter has been entered. Claims 12, 13, and 20-23 have been canceled due to an election made by Applicants. Applicants respectfully submit that Claims 1-11, 14-19, 24, and 25 are allowable.

Rejection Under 35 U.S.C. § 112, second paragraph

The Examiner rejected Claims 17-19 under 35 U.S.C. § 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to Claims 17-19, the Examiner states: "Claims 17-19, each contain means-plus-function clause, which do not have clear support or antecedent basis in the written description to satisfy the requirements of 35 U.S.C. 112 second paragraph." Paper Number 20040901, Application Serial No. 10/763,612, at 3-4.

Claims 17-19 include means-plus-function limitations, as defined by 35 U.S.C. § 112, sixth paragraph. A means-plus-function limitation must be interpreted to cover the corresponding structure, materials, or acts in the specification and "equivalents thereof." 35 U.S.C. § 112, sixth paragraph; *see also* MPEP § 2181. The Examiner "must apply 35 U.S.C. 112, sixth paragraph in appropriate cases, and give claims their broadest reasonable interpretation, **in light of and consistent with the written**

description of the invention in the application." MPEP 2181, sub-section I, pg. 2100-220, 8th ed., rev. 2 (emphasis added).

Applicants' Specification specifically addresses each function contained in Claims 17-19. The Examiner is referred to Specification paragraphs 62 to 66 for details as to the structure corresponding to the functions in the claim. For example, Claim 17 includes the limitation for "a means for changing a temperature of a liquid." The Specification states: "The function of changing a temperature of a liquid is implemented by a thermoelectric device **112** thermally coupled to, in one embodiment, a heat exchanger **108** for containing a fluid, and in another embodiment, a heat exchanger formed from a seat side reservoir **1402** mated to a seat side channel plate **1404**." Application, para. 62.

Applicants respectfully request that the Examiner withdraw his rejection because Applicants' Specification discloses the structure corresponding to the functions in the claim limitations.

Objection to the Specification

The Examiner objects to the Specification for missing the letter "e" in the word "system." The Examiner states: "The disclosure is objected to because of the following informalities: a portion of the title "Syst m" appears to be a typographical error of "System". Appropriate correction is required." Paper Number 20040901, Application Serial No. 10/763,612, at 3.

Applicants would be more than happy to correct any typographical errors; however, Applicants cannot locate the error pointed out by the Examiner. Applicants have carefully reviewed the Image File Wrapper maintained on the Patent Application Information Retrieval (PAIR) system maintained by the Patent and Trademark Office. Applicants have examined page 1 of the Specification showing the title, the Application Data Sheet showing the title, and the Title Of Invention shown by the PAIR system. Applicants have not found the error to which the Examiner refers. Further, because the official record of the Application maintained by the PTO shows the title without typographical error, Applicants respectfully request the Examiner to withdraw his objection. If the Examiner persists in asking for a correction, Applicants respectfully request that the Examiner provide specifics as to which document requires correction.

Rejection Under 35 U.S.C. § 102(b)

Addressing the Examiner's rejection of Claims 6-11 and 17-19 under 35 U.S.C. § 102(b), Applicant respectfully suggests that neither Feher nor Abadilla anticipates the claims of the present invention. Section 2131 of the Manual of Patent Examining Procedure describes the basis for anticipation under 35 U.S.C. § 102(b). "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim. *In re Bond*, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990).

Applicants have amended Claim 6 to include the limitations of "said second heat exchanger including an air trap chamber," and "said controller including a ramp circuit that applies power to said thermoelectric device over a specified period of time." Figure 15 illustrates the air trap chamber **1514** and Figure 19 illustrates the ramp function **1904**. Applicants' Specification describes these elements in detail.

Applicants respectfully submit that neither Feher nor Abadilla disclose an air trap chamber in the heat exchanger coupled to the thermoelectric device. Further, Applicants respectfully submit that neither Feher nor Abadilla disclose a controller having a ramp circuit. Feher does not disclose a control circuit for its thermoelectric device **16**. Abadilla discloses a temperature controller **14** that includes a control circuit; however, the control circuit does not include any provision for ramping the power to the thermoelectric element TE1. Abadilla, Fig. 6. Instead, Abadilla discloses using a temperature controller chip **51** that provides two grounded/ungrounded connections (pins 6, 7) to heating/cooling transistor switches **62, 63, 77, 79**. *Id.*

Because amended independent Claim 6 includes limitations not disclosed in Feher and Abadilla, Applicants respectfully submit that neither Feher nor Abadilla anticipate Claim 6. Having no further rejection of or objection to Claim 6, it is respectfully submitted that Claim 6 is in condition for allowance. Accordingly, Claims

7 to 11 and 14 to 16 are also in condition for allowance as depending from an allowable base claim.

Obviousness Under 35 U.S.C. § 103

The Examiner rejected Claims 15 and 16 under 35 U.S.C. § 103(a) as being unpatentable over Feher in view of Park. The Examiner rejected Claims 1-5 and 14 under 35 U.S.C. § 103(a) as being unpatentable over Abadilla in view of Lee. A rejection under 35 U.S.C. § 103(a) must be supported by a prima facie case of obviousness. MPEP § 2142. "The examiner bears the initial burden of factually supporting any prima facie conclusion of obviousness. If the examiner does not produce a prima facie case, the applicant is under no obligation to submit evidence of nonobviousness." MPEP § 2142, pg. 2100-121.

The first element in establishing a prima facie case of obviousness is that "there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or combine reference teachings." MPEP § 2143. The second element is that there must be a reasonable expectation of success. *Id.* The third element is that "the prior art reference (or references when combined) must teach or suggest all the claim limitations." *Id.* "There are three possible sources for a motivation to combine references: the nature of the problem to be solved, the teachings of the prior art, and the knowledge of persons of ordinary skill in the art." *In re Rouffet*, 149 F.3d 1350, 1357, 47 U.S.P.Q.2d 1453, 1457-58 (Fed. Cir. 1998) (The combination of the references taught every element of the claimed invention, however without a motivation to combine, a rejection based on a prima facie case of obvious was held improper); see MPEP § 2143.01.

Claims 14, 15, and 16

Applicants have amended independent Claim 6 from which Claims 15 and 16 depend. Applicants respectfully submit that Claim 6 is in condition for allowance. Accordingly, Claims 15 and 16 are also in condition for allowance as depending from an allowable base claim.

Claims 1-5

Applicants have amended independent Claim 1 to include the limitations of "said second heat exchanger including an air trap chamber," and "said controller including a ramp circuit that applies power to said thermoelectric device over a specified period of time." As discussed above with respect to Claim 6, neither Feher nor Abadilla disclose the limitations added to Claim 1. Further, neither Parks nor Lee disclose an air trap chamber in the heat exchanger coupled to the thermoelectric device or disclose a controller having a ramp circuit. Accordingly, the third element of a *prima facie* case of obviousness, that the references teach or suggest all the claim limitations, has not been satisfied because none of the cited references disclose the limitations added to Claim 1.

Because amended independent Claim 1 includes limitations not disclosed in the cited references, Applicants respectfully submit that Claim 1 is not obvious. Having no further rejection of or objection to Claim 1, it is respectfully submitted that Claim 1 is in condition for allowance. Accordingly, Claims 2 to 5 are also in condition for allowance as depending from an allowable base claim.

New Claims

Applicants have added Claims 24 and 25. Claim 24 is based on the original Claim 6 with the additional limitation that the controller includes a ramp circuit. Applicants have identified a problem exemplified in the prior art, namely, that switching the power to the thermoelectric devices, such as with a step function, results in a reduction of the useful life of the thermoelectric device.

Conclusion

In view of the amendment of Claims 1 and 6 and the addition of Claims 24 and 25, it is believed that the above-identified patent application is in a condition for the issuance of a Notice of Allowance. Such action by the Examiner is respectfully requested. If, however, the Examiner is of the opinion that any of the drawings or other portions of the application are still not allowable, it will be appreciated if the Examiner will telephone the undersigned to expedite the prosecution of the application.

Please charge any additional fees associated with this communication, or credit any overpayment, to Deposit Account No. 16-1910 (29031.00).

Respectfully submitted,

A handwritten signature in cursive script that reads "Thomas A. Kulaga".

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